

Indiana Department of Environmental Management
Office of Air Management

Rule Fact Sheet December 6, 2000

DEVELOPMENT OF NEW RULES CONCERNING INCORPORATION OF NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR OFF-SITE WASTE AND RECOVERY OPERATIONS, PULP AND PAPER PRODUCTION (NONCOMBUSTION), PHOSPHORIC ACID MANUFACTURING AND PHOSPHATE FERTILIZERS PRODUCTION, GENERIC MACT, PESTICIDE ACTIVE INGREDIENT, MINERAL WOOL PRODUCTION, AND WOOL FIBERGLASS MANUFACTURING #00-183(APCB)

#### Overview

This rulemaking incorporates by reference national emission standards for hazardous air pollutants (NESHAP) for off-site waste and recovery operations, pulp and paper production, phosphoric acid manufacturing, phosphate fertilizers production, generic maximum achievable control technology (MACT), pesticide active ingredient, mineral wool production, and wool fiberglass manufacturing.

Rules specifying MACT for subcategories in the off-site waste and recovery operations NESHAP are included for tanks, containers, surface impoundments, individual drain systems, and oil-water separators and organic-water separators. The generic MACT NESHAP cross-references subcategories for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process, and equipment leaks, which are also listed as separate rules.

### **Citations Affected**

Amends: 326 IAC 20-23.

Adds: 326 IAC 20-33; 326 IAC 20-34; 326 IAC 20-35; 326 IAC 20-36; 326 IAC 20-37; 326 IAC 20-38; 326 IAC 20-39; 326 IAC 20-40; 326 IAC 20-41; 326 IAC 20-42; 326 IAC 20-

43; 326 IAC 20-44; 326 IAC 20-45; 326 IAC 20-46; 326 IAC 20-47.

#### **Affected Persons**

Off-site waste and recovery operations
currently applies to four sources in Indiana:
Reclaimed Energy, Connersville
Eli Lilly and Company, Clinton
Eli Lilly and Company, Lafayette
Reilly Industries, Inc., Indianapolis

Pulp and paper production, noncombustion applies to facilities that produce pulp, paper or paperboard using specified processes. There is one source subject to this rule (International Paper, Terre Haute, IN).

Phosphoric acid manufacturing and phosphate fertilizers production currently has no affected sources in Indiana.

*Generic MACT* currently has one source subject to this rule (GE Plastics, Mt. Vernon, IN).

Pesticide active ingredient currently has no known affected sources in Indiana.

Mineral wool production and wool
fiberglass manufacturing applies to mineral
wool production and wool fiberglass
manufacturing facilities. Sources are generally
located in eastern and north central Indiana.
Sources subject to both rules include:
ANCO Products, Inc., Elkhart

Molded Acoustical, Elkhart
U.S. Mineral Products, Huntington
Sloss Industries, Alexandria
Knauf Fiberglass, Shelbyville
Celotex Corporation, Lagro
Thermafiber LLC Wabash, Wabash
L.C. Cassidy & Son, Inc., Wabash
Johns Manville International, Richmond
Jet Composites, Inc., Bluffton

## **Potential Cost**

There is no additional cost associated with this rulemaking above and beyond the costs associated with the federal rules, which are already in effect.

#### Outreach

IDEM mailed draft rule language and a fact sheet regarding this rulemaking to affected sources and interested parties.

## **Description**

On July 16, 1992, (57 FR 31576), U.S. EPA published a list of industrial groups (i.e., source categories) that emit one or more of the one hundred eighty-eight (188) hazardous air pollutants currently listed in the Clean Air Act. The Clean Air Act requires U.S. EPA to develop national emission standards for hazardous air pollutants (NESHAPs) that require the application of air pollution reduction measures based on maximum achievable control technology (MACT) for the listed source categories. This state rulemaking would incorporate by reference the following NESHAPs:

Off-site waste and recovery operations. On July 1, 1996, U.S. EPA promulgated national emission standards (61 FR 34140, subsequently amended in 64 FR 38950) for facilities that receive certain wastes, used oil, and used solvents from off-site locations for storage, treatment, recovery, or disposal at the facility. The rule requires sources in this category to reduce hazardous air pollutant emissions. General provisions are listed under Subpart DD of the federal rule. The final rule is based on a combination of control equipment and operation standards as well as work practice standards.

Specific requirements for monitoring, record keeping, and reporting are specified in the regulation. Subcategories of off-site waste and recovery operations have been identified and include specific control requirements under Subpart OO (tanks), Subpart PP (containers), Subpart QQ (surface impoundments), Subpart RR (individual drain systems), Subpart VV (oilwater separators and organic-water separators). These Subparts are being presented as separate rules under 326 IAC 20-23, 326 IAC 20-35, 326 IAC 20-36, 326 IAC 20-37, 326 IAC 20-38, and 326 IAC 20-42, respectively. U.S. EPA estimates that this rule will reduce hazardous air pollutant emissions by approximately forty-seven thousand (47,000) tons per year nationwide. The compliance date for existing sources was February 1, 2000. The compliance date for new or reconstructed sources is upon startup. The federal rule was effective on September 20,

*Pulp and paper production facilities.* On April 15, 1998, U.S. EPA promulgated national emission standards (63 FR 18503) to reduce hazardous air pollutant emissions from pulp and paper production facilities. Regulated categories and entities include pulp mills and integrated mills (i.e., mills that manufacture pulp and paper/paperboard) that mechanically, chemically, or semichemically pulp wood fiber using kraft, sulfite, or soda; pulp secondary fiber; or pulp nonwood fiber. This NESHAP specifies emission standards for pulping processes and bleaching processes. The emission standards for pulping and bleaching processes provide several options for compliance, including a pollution prevention option. This NESHAP is being presented under 326 IAC 20-33. The hazardous air pollutants emitted by facilities covered by this NESHAP include compounds such as methanol, chlorinated compounds, formaldehyde, benzene, and xylene. This final NESHAP is estimated to reduce baseline emissions of hazardous air pollutants by sixty-five percent (65%) nationally or one hundred fifty-three thousand one hundred seventy-eight (153,178) tons per year. With a few exceptions, existing sources must comply with the NESHAP no later than April 16, 2001. New or reconstructed sources must comply with

the NESHAP upon startup. The federal rule was effective on June 15, 1998.

Phosphoric acid manufacturing and phosphate fertilizer production. On June 10, 1999, U.S. EPA promulgated national emission standards (64 FR 31357) to reduce hazardous air pollutant emissions from phosphoric acid manufacturing and phosphate fertilizers production facilities. This NESHAP is being presented under 326 IAC 20-34. Hazardous air pollutants emitted by the facilities covered by this rule include hydrogen fluoride, arsenic, beryllium, cadmium, chromium, manganese, mercury and nickel (hazardous air pollutant metals); and methyl isobutyl ketone. Implementing MACT-level controls is expected to reduce these hazardous air pollutant emissions from regulated sources by about three hundred forty-five (345) tons per year nationwide. This rule sets emission limits for the following emission points at affected sources or facilities: wet process phosphoric acid plants, superphosphoric acid plants, purified phosphoric acid plants, phosphate rock dryers, phosphate rock calciners, mono and diammonium phosphate fertilizer plants, and granular triple superphosphate fertilizer plants and storage buildings. The rule is structured to limit emissions across process lines that include several different emissions points for a given production unit. The rule establishes a single limit for each process line. This allows owners and operators the flexibility to arrange, operate, and control each line in the most efficient manner. Process lines for sources subject to the requirement in this rule will be exempted from otherwise applicable, less stringent federal new source performance standards. Each owner or operator of an existing affected source at a phosphoric acid manufacturing plant shall achieve compliance with the requirements of this NESHAP no later than June 10, 2002. Each owner or operator of a new phosphoric acid manufacturing plant must achieve compliance with the requirements upon startup of operations. The federal rule was effective on June 10, 1999.

Generic MACT. On June 29, 1999, U.S. EPA promulgated a program (64 FR 34853) for

setting national emission standards for hazardous air pollutants for certain small source categories consisting of five (5) or fewer major sources. The program consists of a consolidated rulemaking package that provides general control requirements for certain source categories. Generic MACT standards, Subpart YY, cross-references other Subparts of the generic MACT NESHAP. This NESHAP is being presented under 326 IAC 20-44. Categories being cross-referenced are included under Subpart SS (closed vent systems, recovery devices, and routing to a fuel gas system or a process), Subpart TT (equipment leaks-control level 1), Subpart UU (equipment leaks-control level 2 standards), Subpart WW (storage vessels-control level 2) and are being presented as separate rules under 326 IAC 20-39, 326 IAC 20-40, 326 IAC 20-41, and 326 IAC 20-43, respectively. The "generic MACT" standards establish an alternative methodology for making maximum achievable control technology determinations for appropriate small categories by referring to previous MACT standards that have been promulgated for similar sources in other categories. The basic objectives of the generic MACT program are to use public and private sector resources efficiently, and to promote regulatory consistency and predictability in MACT standards development. The final rule promulgates emission standards for acetal resins production, acrylic and modacrylic fiber production, hydrogen fluoride production, and polycarbonate production. U.S. EPA estimates that the impact on hazardous air pollutant emissions will be negligible because sources that would be subject to the requirements of this NESHAP are already well controlled. The owner or operator of an existing affected source must comply with the NESHAP requirements by June 29, 2002. The owner or operator of a new or reconstructed affected source must achieve compliance with the requirements upon startup. If construction or reconstruction commenced after October 14, 1998, but before the effective date of the standards, the affected source must comply with the NESHAP requirements no later than July 1, 2002. The federal rule was effective on June 29, 1999.

Pesticide active ingredient. On June 23, 1999, U.S. EPA promulgated national emission standards (64 FR 33549) to reduce hazardous air pollutant emissions from pesticide active ingredient manufacturing operations. Regulated pesticide active ingredients are used to manufacture insecticide, herbicide, and fungicide pesticide products. The final rule controls emissions from the following areas in the manufacturing process: process vents; storage vessels; waste water and associated treatment residuals; certain equipment (e.g., pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valve connectors, and instrumentation systems); and heat exchange systems. This NESHAP is being presented under 326 IAC 20-45. This final rule will reduce national emissions of hazardous air pollutants (including toluene, methanol, methyl chloride, and hydrochloric acid) by two thousand seven hundred fifty-five (2,755) tons per year (i.e., a reduction of approximately sixty-five percent (65%) from current levels). Affected facilities can choose to comply with this rule's requirements using either add-on control devices or pollution prevention alternatives to control emissions from process vents. Existing sources must comply by June 23, 2002. New or reconstructed sources are required to comply upon startup. The federal rule was effective on June 23, 1999.

Mineral wool production. On June 1, 1999, U.S. EPA promulgated national emission standards (64 FR 29489) for sources in mineral wool production facilities. This NESHAP is being presented under 326 IAC 20-46. Hazardous air pollutants emitted by the facilities covered by this rule include carbonyl sulfide, nine hazardous metals, formaldehyde, and phenol. U.S. EPA estimates that this final rule will reduce nationwide hazardous air pollutant emissions by fifty-one (51) tons per year. For existing sources, compliance with the emission limits must be demonstrated by June 1, 2002. For new and reconstructed sources, any control devices or monitoring equipment necessary to meet the emission limits must be installed upon startup. The federal rule was effective on June 1, 1999.

Wool fiberglass manufacturing. On June 14, 1999, U.S. EPA promulgated national emission standards (64 FR 31695) for sources in wool fiberglass manufacturing facilities. This NESHAP is being presented under 326 IAC 20-47. The hazardous air pollutants emitted by the facilities covered by this rule include compounds of three (3) metals: arsenic, chromium, and lead, and three (3) organic hazardous air pollutants: formaldehyde, phenol, and methanol. U.S. EPA estimates that the final rule will reduce nationwide emissions of hazardous air pollutants from these facilities by five hundred eighty (580) tons per year, a nearly thirty percent (30%) reduction from the current level of emissions. Existing sources must comply by June 14, 2002. New sources must demonstrate compliance with the standards at startup. The federal rule was effective on June 14, 1999.

# Consideration of Factors Outlined in Indiana Code 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
  - 3) Zoning classifications.
- 4) The nature of the existing air quality or existing water quality, as appropriate.
- 5) Technical feasibility, including the quality conditions that could be reasonably be achieved through coordinated control of all factors affecting the quality.
- 6) Economic reasonableness of measuring or reducing any particular type of pollution.
- 7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:
  - (A) human, plant animal, or aquatic life; or (B) the reasonable enjoyment of life and property.

## **Consistency with Federal Requirements**

The new and amended rules are consistent with federal rules.

## **IDEM Contact**

Additional information regarding this rulemaking action can be obtained by calling (800) 451-6027 (in Indiana), press 0 and ask for Chrystal Amr, Rule Development Section, Office of Air Management, (or extension 4-1203) or dial (317) 234-1203.